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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,844	03/30/2004	Brian Boyle	1-24766	3126

46582 7590 05/02/2005

MACMILLAN, SOBANSKI & TODD, LLC
ONE MARITIME PLAZA - FOURTH FLOOR
720 WATER STREET
TOLEDO, OH 43604

EXAMINER

KRAMER, DEVON C

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 05/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/812,844

Applicant(s)

BOYLE, BRIAN

Examiner

Devon C Kramer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 August 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Drawings

1) The drawings are objected to under 37 CFR 1.83(a) because they fail to show fasteners 24 and lever 138 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2) The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "82" has been used to designate both a first end and a

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pivot pin; reference character "192" has been used to designate both "a member" and "an end"; reference character "288" has been used to designate both "a first end" and "a second end". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3) The disclosure is objected to because of the following informalities: The specification is objected to because the written disclosure does not agree with the drawings Applicant need to amend the specification and / or the drawings to overcome the objections.

Appropriate correction is required.

Claim Objections

4) Claims 11-12 are objected to because of the following informalities: The claims are identical. Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 5) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 6) Claims 6, 14-15 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 6, 14, and 18 recite the limitation "said third opening" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "said bottom leg" in line 9. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 recites the limitation "said slot" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 recites the limitation "said bottom leg" in line 9. There is insufficient antecedent basis for this limitation in the claim.

Claims 15 recites the limitation "said boot seal" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

7) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8) Claims 1-2, 5-8, 16-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans (5180037) in view of Ikeda (6390248) and further in view of figure 3 of applicant's admitted prior art in the instant application.

In re claims 1-2, 5-8, 16-18 and 20, Evans provides a drum-in-hat disc brake assembly having a disc service brake (col. 2 lines 11-18) and an emergency brake (25), the assembly comprising: a backing plate (21) adapted to support a drum brake shoe assembly of the drum-in-hat parking and emergency brake; a caliper bracket (26, 27) adapted to support a disc brake caliper assembly; a drum-in-hat adapter (22) adapted to support a disc brake caliper assembly; wherein the drum-in-hat parking and emergency brake includes a park brake cable end assembly (61) including a lever (55) supported on a link (69). Evans lacks the teaching of the lever end and a clevis.

Ikeda teaches a lever end that is generally G-shaped having a rear leg (90), a bottom leg (93), a front leg (hook portion) and a slot formed therein, but lacks the teaching of the means used to attach the cable. Please note that the end portion of Ikeda has the same shape as that of the instant application and therefor meets the limitations of claim 6.

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It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the lever of Evans with a G-shaped end of Ikeda to ensure that the cable stays attached to the lever by means of hooking it in place.

Figure 3 of applicant's prior art teaches a clevis shaped cable end.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the assembly of Evans as modified by Ikeda with a clevis as taught by figure 3 of the admitted prior art of the instant application merely to provide a known means to attach a cable to a lever that is secure and has a minimal chance of becoming disconnected.

In re claim 2, see Evans element 68 through which a pin is inserted.

In re claim 7, see item 65 of Evans.

IN re claim 8, Evans lacks the claimed arrangement of the boot seal.

Ikeda teaches a boot seal (figure 7) that presses the lever and the link together.

It would have been obvious to one of ordinary skill in the art to have provided the assembly of Evans with a boot seal as taught by Ikeda merely to prevent contaminants from getting on the assembly reducing the life of the brake.

9) Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans (5180037) in view of Ikeda (6390248) and further in view of figure 3 of applicant's admitted prior art in the instant application and even further in view of Hara et al (6427653).

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In re claim 3-4, Evans is silent to how the pivot pin is attached. It is well known in the art to assembly a pivot pin either by pressing or extruding.

Hara et al teaches extruding a pivot pin (53).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have attached the pivot pin of Evans by extruding as taught by Hara et al merely to ensure a tight secure fit for the pin and to lower the chances of it becoming disconnected.

10) Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans (5180037) in view of figure 3 of applicant's admitted prior art in the instant application.

In re claims 9, Evans provides a drum-in-hat disc brake assembly having a disc service brake (col. 2 lines 11-18) and an emergency brake (25), the assembly comprising: a backing plate (21) adapted to support a drum brake shoe assembly of the drum-in-hat parking and emergency brake; a caliper bracket (26, 27) adapted to support a disc brake caliper assembly; a drum-in-hat adapter (22) adapter adapted to support a disc brake caliper assembly; wherein the drum-in-hat parking and emergency brake includes a park brake cable end assembly (61) including a lever (55) supported on a link (69). Evans lacks the teaching of the lever end and a clevis.

Figure 3 of applicant's prior art teaches a clevis shaped cable end.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the assembly of Evans with a clevis as taught by figure 3 of

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the admitted prior art of the instant application merely to provide a known means to attach a cable to a lever that is secure and has a minimal chance of becoming disconnected.

In re claim 10, see Evans element 68 through which a pin is inserted.

11) Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans (5180037) in view of figure 3 of applicant's admitted prior art in the instant application and further in view of Hara et al (6427653).

In re claims 11-12, Evans is silent to how the pivot pin is attached. It is well known in the art to assembly a pivot pin either by pressing or extruding.

Hara et al teaches extruding a pivot pin (53).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have attached the pivot pin of Evans by extruding as taught by Hara et al merely to ensure a tight secure fit for the pin and to lower the chances of it becoming disconnected.

12) Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans (5180037) in view of figure 3 of applicant's admitted prior art in the instant application and further in view Ikeda (6390248)

In re claims 13-14, Evans as modified by figure 3 of applicants admitted prior art lacks the claimed lever end.

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Ikeda teaches a lever end that is generally G-shaped having a rear leg (90), a bottom leg (93), a front leg (hook portion) and a slot formed therein, but lacks the teaching of the means used to attach the cable. Please note that the end portion of Ikeda has the same shape as that of the instant application and therefor meets the limitations of claim 14.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the lever of Evans with a G-shaped end of Ikeda to ensure that the cable stays attached to the lever by means of hooking it in place.

IN re claim 15, Evans lacks the claimed arrangement of the boot seal.

Ikeda teaches a boot seal (figure 7) that presses the lever and the link together.

It would have been obvious to one of ordinary skill in the art to have provided the assembly of Evans with a boot seal as taught by Ikeda merely to prevent contaminants from getting on the assembly reducing the life of the brake.

13) Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evans (5180037) in view of Ikeda (6390248) and further in view of figure 3 of applicant's admitted prior art in the instant application and even further in view of Heckel (6116103).

Evans, Ikeda and the prior art of figure 3 are silent to the material of the lever.

Heckel teaches a brake lever made of steel.

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It would have been obvious to one of ordinary skill in the art at the time of the invention to have made the levers of Evans, Ikeda or the prior art from steel merely as a design choice and to provide a strong durable material.

Conclusion

14) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pontius, Sherman et al, Sherman, Loken et al, De Vecchi, Doolittle, Capek et al and Johannesen et al all provide cables attached to levers for actuating the brakes.

15) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devon C Kramer whose telephone number is 571-272-7118. The examiner can normally be reached on Mon-Fri 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Devon C Kramer

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Examiner
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DK

DEVON C. KRAVITZ
PATENT EXAMINER
Dean 4/26/05